

WHAT IS CLAIMED IS:

1. An object model supporting an application programming interface to a natural language processing system for natural language processing of a natural language input, comprising:

a set of classes, part of which are configured to include context information indicative of a desired natural language processing (NLP) analysis set, the desired NLP analysis set being one or more of a plurality of NLP analyses performed on the natural language input by one or more NLP engines, the set of classes being further configured to receive the natural language input and provide analysis results for the desired NLP analysis set.

2. The object model of claim 1 wherein the set of classes comprises:

a context class configured to include the context information; and

a text class associated with the context class and invocable by an application and configured to receive the natural language input and provide the analysis results for the desired NLP analysis set in the associated context class.

3. The object model of claim 1 wherein the set of classes is configured to expose the context

information to integrate the plurality of NLP analyses across multiple languages.

4. The object model of claim 1 wherein the set of classes is configured to expose the context information to integrate the plurality of NLP analyses across multiple lexicons.

5. The object model of claim 1 wherein the context information is included in members exposed by the set of classes.

6. The object model of claim 1 wherein the context information includes a culture member indicative of whether automatic language detection is to be used.

7. The object model of claim 1 wherein the context information includes a lexicon member configured to load additional lexicons into the NLP system.

8. The object model of claim 1 wherein the context information includes a capabilities member indicative of NLP capabilities of the NLP system for a given language.

9. The object model of claim 1 wherein the context information includes a repeated words member indicative of whether the NLP system is to check for repeated words in the natural language input.

10. The object model of claim 1 wherein the context information includes a compound member indicative of whether the NLP system is to perform compound word analysis on the natural language input.

11. The object model of claim 1 wherein the context information includes an inflection member indicative of whether the NLP system is to generate morphological inflections of words in the natural language input.

12. The object model of claim 1 wherein the context information includes a lemma member indicative of whether the NLP system is to identify lemmas or stems of words in the natural language input.

13. The object model of claim 1 wherein the context information includes a Named Entity member indicative of whether the NLP system is to check for Named Entities in the natural language input.

14. The object model of claim 1 wherein the context information includes a normalization member indicative of whether the NLP system is to identify normalizations for the natural language input.

15. The object model of claim 1 wherein the context information includes a single language member indicative of whether the natural language input is all in a single language.

16. The object model of claim 1 wherein the context information includes a spelling member indicative of whether the NLP system is to perform spelling related services on the natural language input.

17. The object model of claim 2 wherein the text class includes a TextChunk class having members exposed to receive the natural language input.

18. The object model of claim 17 wherein the TextChunk class has one or more members exposed to identify sentences of the natural language input already processed.

19. The object model of claim 17 wherein the TextChunk class has an exposed context member configured to identify the associated context class.

20. The object model of claim 17 wherein the text class includes a Sentence class having members exposed to receive a sentence in the natural language input.

21. The object model of claim 20 wherein the Sentence class includes members exposed to indicate analysis results for the sentence.

22. The object model of claim 20 wherein the Sentence class includes members exposed to indicate

whether the sentence is an end of a paragraph in the natural language input.

23. The object model of claim 22 wherein the Sentence class includes members exposed to identify a tokenization of the sentence.

24. The object model of claim 22 wherein the NLP class includes a Segment class associated with a portion of the natural language input and having members exposed to indicate the analysis results of the desired NLP analysis set for the associated portion of the natural language input.

25. The object model of claim 24 wherein the members exposed by the Segment class include an alternative member indicative of an alternative tokenization of the associated portion of the natural language input.

26. The object model of claim 24 wherein the members exposed by the Segment class include one or more semantic analysis members indicative of results of a semantic analysis of the associated portion of the natural language input.

27. The object model of claim 24 wherein the members exposed by the Segment class include one or more syntactic analysis members indicative of results of a syntactic analysis of the associated portion of the natural language input.

28. The object model of claim 24 wherein the members exposed by the Segment class include one or more part-of-speech analysis members indicative of results of a part-of-speech analysis of the associated portion of the natural language input.

29. The object model of claim 24 wherein the members exposed by the Segment class include one or more lexicon members indicative of a recognition of the associated portion of the natural language input by a lexicon.

30. The object model of claim 29 wherein the one or more lexicon members include an annotation property that identifies annotations associated with an entry in the lexicon that spawned the recognition.

31. An application programming interface (API) to a natural language processing (NLP) system, comprising:

- a plurality of exposed context members invocable by an application to set a given context by setting context information indicative of desired NLP analyses, from a plurality of possible NLP analyses, associated with the given context; and

- a plurality of exposed text members invocable to receive a natural language input to be processed and to return analysis results for the desired NLP analyses performed on

the natural language input in the given context.

32. The API of claim 31 wherein the plurality of exposed context members include a language detection member indicative of whether language detection is to be performed by the NLP system, such that the NLP analyses are integrated in the API across multiple different languages.

33. The API of claim 31 wherein the exposed context members include a lexicon member for loading additional lexicons into the NLP system such that the lexicons are shared among the plurality of possible NLP analyses.

34. The API of claim 31 wherein the plurality of exposed text members include input members for inputting the natural language input to the NLP system.

35. The API of claim 31 wherein the plurality of exposed text members include result members for returning analysis results for portions of the natural language input.

36. The API of claim 35 wherein the plurality of exposed text members include semantic result members indicative of semantic analysis results for a portion of the natural language input.

37. The API of claim 35 wherein the plurality of exposed text members include syntactic result members indicative of syntactic analysis results for a portion of the natural language input.

38. A computer readable medium having stored thereon computer readable instructions which, when read by the computer cause the computer to perform steps of:

receive a natural language input through an application programming interface (API);

provide the natural language input to one or more natural language processing (NLP) components to perform a set of selected NLP analysis operations on the natural language input, selected from a plurality of different possible NLP analysis operations selectable through the API; and

return analysis results from the selected NLP analysis operations through the API.

39. The computer readable medium of claim 38 further comprising:

an object model instantiable by the computer to support the API.

40. The computer readable medium of claim 39 wherein the object model comprises:



a context object having exposed members that identify the selected NLP analysis operations.

41. The computer readable medium of claim 39 wherein the object model comprises:

an NLP object having exposed members to receive the natural language input and to return the analysis results.